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## REMARKS

Reconsideration of the Final Office Action mailed February 22, 2005, (hereinafter "instant Office Action"), entry of the foregoing amendments and withdrawal of the rejection of claims 1-8, 10, 46 and 47, are respectfully requested.

In the instant Office Action, claims 1-8, 10, 11 and 46-52 are listed as pending, claims 11 and 48-51 are listed as withdrawn from consideration and claims 1-8, 10, 46 and 47 are listed as rejected. On page 7 of the instant Office Action the Examiner states that claim 7 is allowed.

Applicants thank the Examiner for his time during the interview conducted on September 29, 2005 with Applicants' representatives John Conway and Gayle O'Brien.

Applicants gratefully acknowledge that the Examiner has withdrawn the rejection of claims 1-8, 10 and 47 under 35 U.S.C. §102(a) as allegedly being anticipated by Calderwood et al., WO 98/41525.

Applicants gratefully acknowledge that the Examiner has withdrawn the rejection of claims 1-8, 10 and 47 under 35 U.S.C. §102(e) over U.S. Patent No. 6,001,839.

The Examiner has maintained the rejection of claims 1-8, 10 and 47 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as his invention. The Examiner also notes that in claim I, in the definition of R<sub>c</sub>, the recitation "-W-(CH<sub>2</sub>)<sub>C</sub>NR<sub>d</sub>R<sub>e</sub>," is repeated. Applicants have amended claim 1 to delete the repeated phrase.

Based upon the foregoing amendment, the rejection of claims 1-8, 10 and 47 under 35 U.S.C. §112, second paragraph, is obviated and should be withdrawn.

The Examiner has maintained the rejection of claims 1-8, 10, 46 and 47 under 35 U.S.C. §103(a) over Calderwood et al., WO 98/41525. Applicants respectfully traverse this rejection and maintain the arguments presented in the Replies filed November 30, 2004, March 26, 2004, July 11, 2003 and February 11, 2003. The Examiner states:

Applicant excluded the specific compounds disclosed in the reference by a proviso statement. The claims, however, continue to encompass compounds within the reference genus. It would have been obvious to one having ordinary skill in the art at the time of the invention to select any of the species of the genus taught by the reference, including those instantly claimed, because the skilled chemist would have the reasonable expectation that any of the species of the

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genus would have similar properties and, thus, the same use as taught for the genus as a whole, i.e. as pharmaceutical therapeutic agents. One of ordinary skill in the art would have been motivated to select the claimed compound from the genus in the reference since such compounds would have been suggested by the reference as a whole. It has been held that a prior art disclosed genus of useful compounds is sufficient to render prima facie obvious a species falling within a genus.

Applicants respectfully disagree and direct the Examiner's attention to M.P.E.P. §2144.08 which states:

The fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a *prima facie* case of obviousness. <u>In re Baird</u>, 16 F.3d 380, 382, 29 USPQ2d 1550, 15512 (Fed. Cir. 1994).

In making a *prima facie* obviousness determination, an invention must be considered as a whole. The Examiner has not shown that WO 98/41525 provides any suggestion or motivation to one of ordinary skill in the art to make Applicants' genus as it appears in claim 46. Nor has the Examiner shown that WO 98/41525 teaches or suggests all the variables of Applicants' genus as it appears in claim 1. The Examiner states "..the reference clearly teaches 4-amino-7H-pyrrolo[2,3-d]pyrimidin-5-yl compounds having an optionally substituted phenyl ring (wherein the optional substituents include alkoxy, halo, etc. see the list in page 3, lines 26-28) attached at the 5-position, which phenyl is further substituted with -A-R<sub>5</sub>" and points out two species. However, the Examiner does not address the numerous compounds in the instant application wherein Applicants' R<sub>3</sub> is a moiety other than phenyl.

The Examiner has not established by clear and convincing evidence that one of ordinary skill in the art would have been motivated to select example 34 out of the 48 compounds disclosed in Calderwood et al. as a lead compound. Yamanouchi, 231 F.3d at 1344; see also Dillon, 919 F.2d at 602 (finding that prima facie obviousness is established "where the prior art gives reason or motivation to make the claimed compositions"). In In re Baird, supra, the court found:

...the generic diphenol formula disclosed in Knapp contains a large number of variables, and we estimate that it encompasses more than 100 million different diphenols, only one of which is bisphenol A. While the Knapp formula unquestionably encompasses bisphenol A when specific variables are chosen, there is nothing in the disclosure of Knapp suggesting that one should select such variables.

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In much the same way, the genus of Calderwood encompasses many compounds and like In re Baird, when specific variables are chosen the genus of Calderwood slightly overlaps with Applicants' genus. However, one of ordinary skill in the art could select any number of variables and arrive at a different genus which would also overlap with Calderwood.

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## In re Baird further found:

The diphenols that Knapp specifically discloses to be 'typical, ' 'preferred,' and 'optimum' are different from and more complex than bisphenol A, we conclude that Knapp does not teach or fairly suggest the selection of bisphenol A. See *In re Bell*, 991 F.2d 781, 26 U.S.P.Q.2d (BNA) 1529 (Fed. Cir. 1993).

Like Knapp, Calderwood discloses preferred examples and on page 7 shows a formula of a preferred group of compounds wherein there is a phenoxyphenyl moiety at the 5-position. The instant application does not encompass such compounds and therefore Calderwood teaches away from the instantly claimed compounds.

In addition, in order to have a prima face case of obviousness, there must be some suggestion or motivation in the reference to modify the reference to arrive at Applicants' genus. In re Deuel, 51 F.3d 1552 and states:

...the question becomes whether the prior art would have suggested making the specific molecular modifications necessary to achieve the claimed invention. See In re Jones, 958 F.2d 347, 351, 21 USPQ2d 1941, 1944 (Fed Cir 1992), In re Dillon, 919 F.2d 688, 692, 16 USPQ2d 1897, 1901 (Fed. Cir 1990)(en banc) ("structural similarity between claimed and prior art subject matter,...where the prior art gives reason or motivation to make the claimed compositions, creates a prima facie case of obviousness")...In re Grabiak, 769 F.2d 720, 731-32 226 USPQ (Fed. Cir. 1985) ("In the case before us there must be adequate support in the prior art for the [prior art] ester/[claimed] thioester change in structure, in order to complete the PTO's prima facie case and shift the burden of going forward to the applicant." In re Lalu, 747 F.2d 703, 705, 223 USQ 1257, 1258 (Fed. Cir. 1984) ("The prior art must provide one of ordinary skill in the art the motivation to make the proposed molecular modifications needed to arrive at the claimed compound.").

One of ordinary skill in the art could select any number of variables and arrive at a genus different from Applicants' genus but which would also overlap with Calderwood. The Examiner has not pointed out where and how Calderwood provides the motivation that one would select precisely the right variables to arrive exactly at Applicants' genus based upon Calderwood's

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disclosure. Merely because the genuses overlap does not make Applicants' genus obvious over Calderwood. The chemical art is replete with patentable, overlapping genuses.

Based upon the foregoing, the rejection of claims 1-8, 10, 46 and 47 under 35 U.S.C. §103(a) over Calderwood et al., WO 98/41525, is obviated and should be withdrawn.

Applicants acknowledge that the Examiner has advised Applicants that "...should claim 6 be found allowable, claim 7 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof....Claim 7 does not further limit the scope of claim 6".

Applicants gratefully acknowledge that claim 52 is allowed.

In view of the foregoing amendments and remarks, Applicants believe that claims 1-8, 10 and 46-52 are in condition for allowance. Prompt and favorable action is earnestly solicited.

If the Examiner believes that a telephone conference would advance the condition of the instant application for allowance, Applicants invite the Examiner to call Applicants' agent at the number noted below.

Respectfully submitted,

Youls O'Breen

Date: October 24 2005

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